

Sept. 8, 1925.

1,552,508

L. M. ROEDER

FOUNTAIN TOOTHBRUSH

Filed July 21, 1924

Fig. 1.

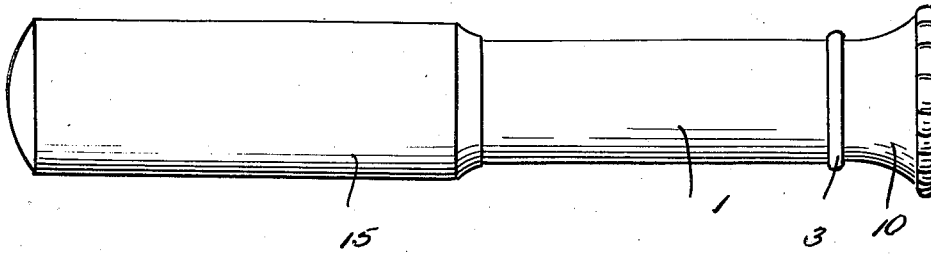


Fig. 2.

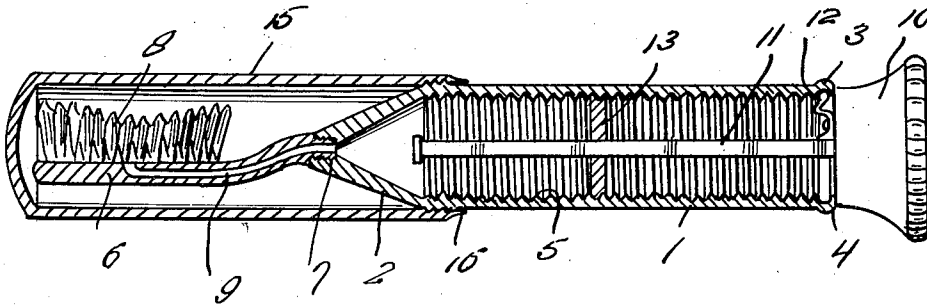
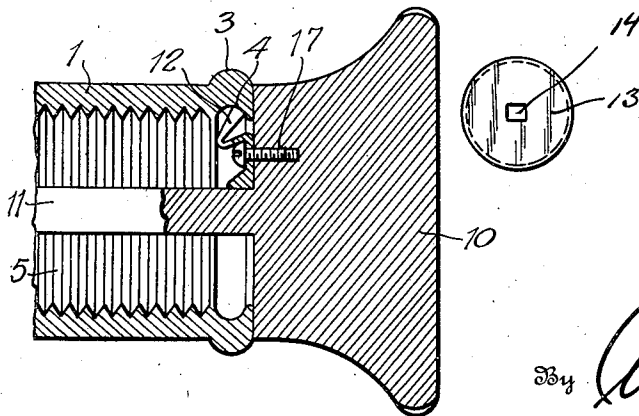


Fig. 4

Fig. 3.



Leonard M. Roeder,
Inventor

By *Charles W. Quinn*
Attorney

UNITED STATES PATENT OFFICE.

LEONARD M. ROEDER, OF DWIGHT, ILLINOIS.

FOUNTAIN TOOTHBRUSH.

Application filed July 21, 1924. Serial No. 727,293.

To all whom it may concern:

Be it known that I, LEONARD M. ROEDER, a citizen of the United States, residing at Dwight, in the county of Livingston and State of Illinois, have invented certain new and useful Improvements in Fountain Toothbrushes, of which the following is a specification.

This invention relates to new and useful improvements in fountain tooth brushes, and has for its principal object to provide a means whereby the handle for the toothbrush combines a receptacle for the tooth paste, means being further provided whereby any desired amount of tooth paste may be discharged from a container onto the bristles of the brush.

A further object of the invention is to provide a fountain brush of the above mentioned character, whereby a slidable follower is arranged within the container for containing the tooth paste therein, for feeding it outwardly therefrom, and through the brush head, so that the tooth paste will be discharged onto the bristles of the brush.

A further object of the invention is to provide a fountain tooth brush of the above mentioned character, which is of such a construction as to enable the parts to be readily disassembled, in order to refill the container after all of the tooth paste therein has been consumed, a cap being provided encasing the brush head, when the tooth brush is not in use.

A further object of the invention is to provide a fountain tooth brush of the above mentioned character, which is simple in construction, inexpensive, strong and durable, and further well adapted for the purpose for which it is designated.

Other objects and advantages of this invention will become apparent during the course of the following description.

In the accompanying drawing, forming a part of this specification, and in which like numerals designate like parts throughout the same:

Figure 1 is a side elevation of my improved fountain tooth brush with the cap positioned over the brush head and the forward end of the container.

Figure 2 is a longitudinal sectional view, through the container, brush head, and cap.

Figure 3 is a detail elevational view of the follower, and

Fig. 4 is an enlarged detail section showing the knob and the adjacent end of the container.

In the drawing, wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 1 designates a cylindrical casing or container which is provided at its forward end with the conical head 2, that provides the discharge end of the container. The opposite end of the container terminates in the flange 3, and an annular groove 4 is provided on the inner periphery of the flange, the purpose of which will hereinafter be more fully described. A container is internally threaded throughout its length as illustrated at 5.

Adapted to be detachably associated with the conical head 2 which forms the discharge end for the container 1, is the brush head 6, the shank portion thereof being threaded, over the conical head 2, in the manner as illustrated at 7 in the drawing, with reference more particularly to Figure 2. The bristles of the brush head are located at 8 in the drawings, and for the purpose of affording a communication between the bristles of the brush head and the container 1, I provide the brush head and the shank portion thereof with the channel or pocket 9. Associated with the rear end of the container 1 is the knob 10, and carried thereby and extending longitudinally and centrally within the container 1 is the shaft 11, the latter being substantially square in cross section, a purpose of which will be presently described. The free end of the shaft 11 extends slightly into the conical head and arranged in the forward end of the container as is illustrated in Figure 2. To support the shaft 11 and the knob 10 in position with respect to the casing or container 1, I provide the spring finger 12 which is secured to the knob on the shaft 11 by fastener 17, and the free end of the spring finger is receivable in the annular groove 4 provided on the inner periphery of the flange 3. This will enable the knob and shaft to be rotated, and will hold the knob in position against accidental displacement from the container. The knob 10 furthermore provides a closure for the rear end of the container, after the same has been filled with the tooth paste.

For the purpose of discharging the tooth paste from the container out through the outlet end and through the passage 9 onto

the bristles 8 of the brush head 6, the follower 13 is provided, and the same comprises a disc which is provided with a substantially square shaped recess 14, in the central portion thereof, to receive the shaft 11, and the periphery of the disc 13 is threaded for engagement with the internal threads 5 in the container. By constructing the disc in a manner as above set forth the same will be prevented from rotating on the shaft 12, while it will be adapted for slidable movement thereon, whereby the tooth paste will be forced out through the cylindrical shaped head 2, whenever the knob 10 is turned in one direction.

By rotating the knob in the opposite direction, the follower 13 will return to the rear portion of the shaft to enable the same to be disposed in the rear portion of the container when the latter is filled with the tooth paste.

When the tooth brush is not in use, the brush head and the bristles carried thereby may be protected from any foreign substance by placing the cap 15 thereover, the inner end of the cap being internally threaded and adapted for threaded engagement with the external threads provided on the forward portion of the container, in the manner illustrated at 16, in Figure 2 of the drawing.

The provision of a fountain tooth brush of the above mentioned character enables the handle therefor to act as a container for the tooth paste and by simply rotating the knob, a supply of tooth paste may be readily and

easily discharged onto the bristles of the brush which will save considerable time and labor and also prevent any unnecessary waste in dispensing the tooth paste onto the bristles of the brush.

The construction of my improved fountain tooth brush furthermore enables the parts to be readily disassembled whenever it becomes necessary to refill the container and when in an operative position, the parts will at all times be positive and efficient for carrying out the purposes for which the same are designated.

While I have shown the preferred embodiment of my invention, it is to be understood that various changes in the size, shape, and arrangement of parts, may be resorted to, without departing from the spirit of the invention and the scope of the appended claim.

Having thus described my invention, what I claim is:

A fountain brush of the class described including a container, a brush head associated with the container at one end, the other end of the container being open, a follower in the container, a shaft extending into the container for operating the follower, and a knob closing the open end of the container and connected to the shaft, said container being provided with an annular internal groove, and a spring finger projecting from the knob into said groove for holding the knob against accidental displacement.

In testimony whereof I affix my signature.

LEONARD M. ROEDER.